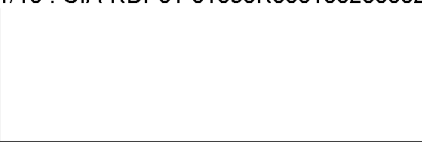


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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECURITY INFORMATION

50X1

COUNTRY East Germany
SUBJECT Precision Grinding Machine at Zeiss, Jena
DATE OF INFO.
PLACE ACQUIRED

REPORT
DATE DISTR. 8 October 1953
NO. OF PAGES 5
REQUIREMENT
REFERENCES
50X1-HUM
50X1-HUM

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

50X1-HUM



50X1

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STATE	#x	ARMY	#x	NAVY	#x	AIR	#x	FBI		AEC		ORR	Ev	x	OSI	x
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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

50X1

SECRET
SECURITY INFORMATION

REPORT

50X1-HUM

COUNTRY : East Germany

DATE DISTR. 26 AUG. 53

SUBJECT : Precision Grinding Machine

NO. OF PAGES 50X1-HUM

PLACE ACQUIRED

NO. OF ENCLS. 2
(LISTED BELOW)

DATE ACQUIRED

SUPPLEMENT TO REPORT 50X1

DATE OF II

50X1-HUM

THIS IS UNEVALUATED INFORMATION

50X1-HUM

50X1

50X1

1. This machine was designed to grind ball bearing races with a diameter of from 20 millimeters to 50 millimeters.

2.
3.

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4. had worked on only one grinding machine. This machine was only about three fourths completed

in March, 1953
this machine was to be used at the Zeiss Plant in Jena where working on it.

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SECURITY INFORMATION

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50X1

-3-

5. [REDACTED]
6. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] this machine was to be used for only the final polishing stage, grinding races from about fifty one-thousandths of a millimeter down to the required dimension.
7. [REDACTED] 50X1-HUM
[REDACTED] a skilled grinding machine operator would be able to operate this machine with only two or three days' training.
8. [REDACTED]
[REDACTED]
The most probable difficulty, which would be encountered in operating this machine, would be in keeping the oil pressure constant around the grinding spindle. The grinding spindle was designed to operate at from 50,000 to 60,000 RPM in the oil bath, and its construction had been completed except for minor details [REDACTED]
[REDACTED] Another difficulty indirectly connected with operating this machine would be encountered in keeping the room temperature constant at twenty degrees centigrade. 50X1-HUM
9. [REDACTED]
10. The bed of this machine was about one by one and one half meters, and was about one meter high. One man would operate the machine.
Sketch or diagram of machine.
[See Enclosures(A) and (B).]

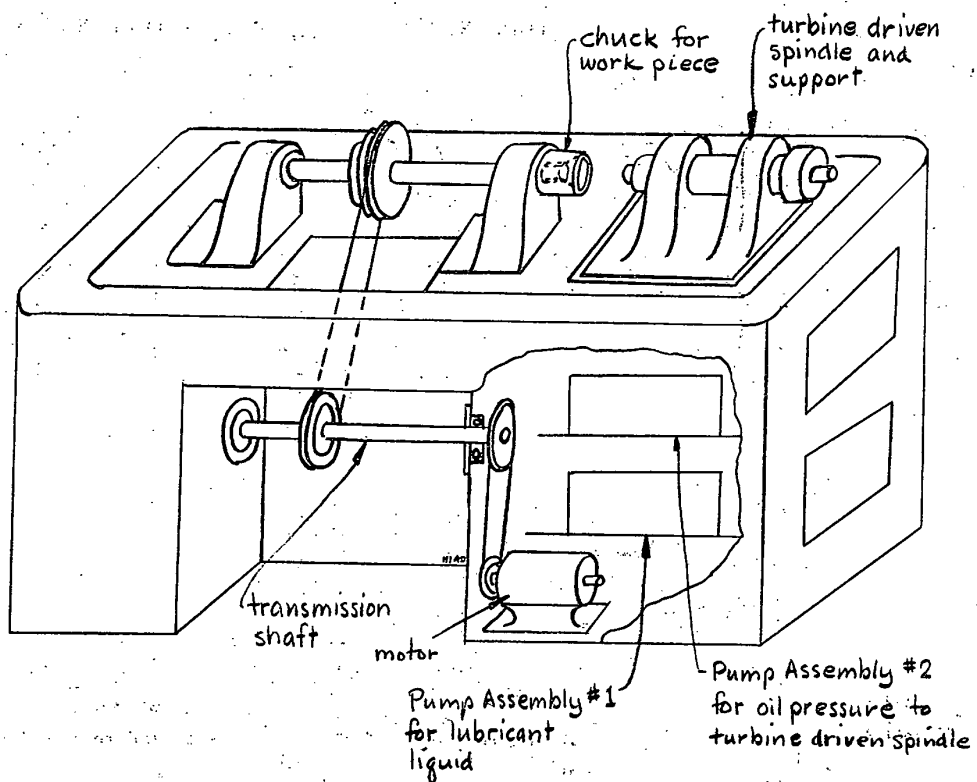
ENCLOSURE (A): High Precision Ball Bearing Race Grinding Bench

ENCLOSURE (B): Cross Section of Turbine Driven Grinding Spindle.

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High Precision Ball Bearing Race
Grinding Bench
Enclosure (A)
Scale 1:10

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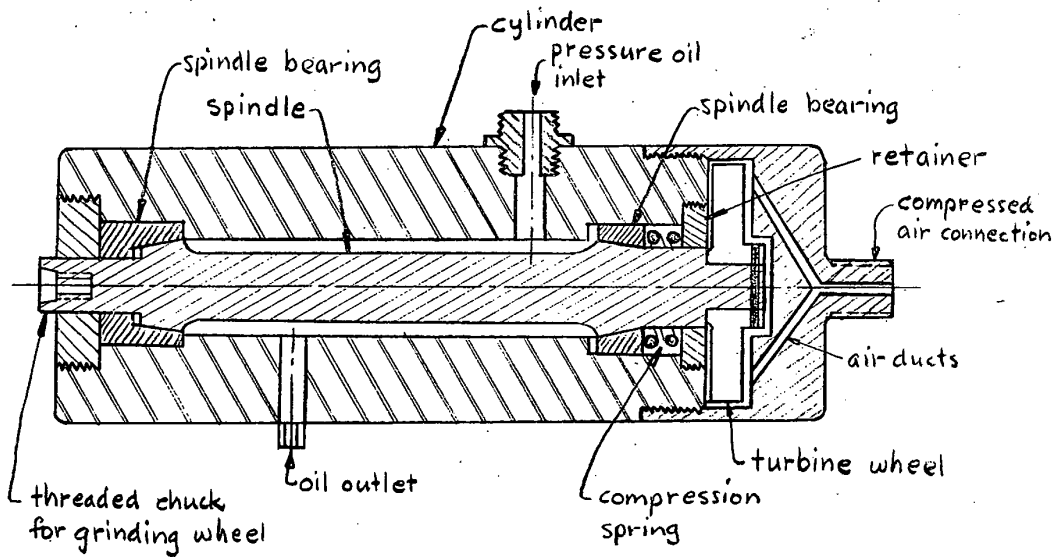
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Cross Section of Turbine Driven Grinding
Spindle

Enclosure (B)

Scale: Full size

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